

Pilar Lisbona

List of Publications by Year in descending order

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Version: 2024-02-01

61
papers

2,233
citations

304602

22
h-index

223716

46
g-index

65
all docs

65
docs citations

65
times ranked

1972
citing authors

#	ARTICLE	IF	CITATIONS
1	Power to Gas projects review: Lab, pilot and demo plants for storing renewable energy and CO ₂ . Renewable and Sustainable Energy Reviews, 2017, 69, 292-312.	8.2	475
2	The Calcium-Looping technology for CO ₂ capture: On the important roles of energy integration and sorbent behavior. Applied Energy, 2016, 162, 787-807.	5.1	286
3	Optimizing make-up flow in a CO ₂ capture system using CaO. Chemical Engineering Journal, 2009, 147, 252-258.	6.6	112
4	Integration of Carbonate CO ₂ Capture Cycle and Coal-Fired Power Plants. A Comparative Study for Different Sorbents. Energy & Fuels, 2010, 24, 728-736.	2.5	88
5	A review on CO ₂ mitigation in the Iron and Steel industry through Power to X processes. Journal of CO ₂ Utilization, 2021, 46, 101456.	3.3	83
6	Energy penalty reduction in the calcium looping cycle. International Journal of Greenhouse Gas Control, 2012, 7, 74-81.	2.3	81
7	Economical assessment of competitive enhanced limestones for CO ₂ capture cycles in power plants. Fuel Processing Technology, 2009, 90, 803-811.	3.7	79
8	Reduction of greenhouse gas emissions by integration of cement plants, power plants, and CO ₂ capture systems. , 2011, 1, 72-82.		75
9	Analysis of a solid oxide fuel cell system for combined heat and power applications under non-nominal conditions. Electrochimica Acta, 2007, 53, 1920-1930.	2.6	74
10	Design and analysis of heat exchanger networks for integrated Ca-looping systems. Applied Energy, 2013, 111, 690-700.	5.1	49
11	Enhanced coal gasification heated by unmixed combustion integrated with an hybrid system of SOFC/GT. International Journal of Hydrogen Energy, 2008, 33, 5755-5764.	3.8	47
12	Energy storage in Spain: Forecasting electricity excess and assessment of power-to-gas potential up to 2050. Energy, 2018, 143, 900-910.	4.5	46
13	Operation of a Cyclonic Preheater in the Ca-Looping for CO ₂ Capture. Environmental Science & Technology, 2013, 47, 11335-11341.	4.6	44
14	Power to gas-oxyfuel boiler hybrid systems. International Journal of Hydrogen Energy, 2015, 40, 10168-10175.	3.8	44
15	Power to Gas – biomass oxycombustion hybrid system: Energy integration and potential applications. Applied Energy, 2016, 167, 221-229.	5.1	44
16	Hydrodynamical model and experimental results of a calcium looping cycle for CO ₂ capture. Applied Energy, 2013, 101, 317-322.	5.1	42
17	Power to gas-electrochemical industry hybrid systems: A case study. Applied Energy, 2017, 202, 435-446.	5.1	41
18	Future applications of hydrogen production and CO ₂ utilization for energy storage: Hybrid Power to Gas-Oxycombustion power plants. International Journal of Hydrogen Energy, 2017, 42, 13625-13632.	3.8	41

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19	Decision-making methodology for managing photovoltaic surplus electricity through Power to Gas: Combined heat and power in urban buildings. <i>Applied Energy</i> , 2018, 228, 1032-1045.	5.1	39
20	Operation of a Mixing Seal Valve in Calcium Looping for CO ₂ Capture. <i>Energy & Fuels</i> , 2014, 28, 2059-2068.	2.5	28
21	Power-to-Gas: Analysis of potential decarbonization of Spanish electrical system in long-term prospective. <i>Energy</i> , 2018, 159, 656-668.	4.5	28
22	Energy Assessment of Ethanol-Enhanced Steam Reforming by Means of Li ₄ SiO ₄ Carbon Capture. <i>Energy & Fuels</i> , 2016, 30, 1879-1886.	2.5	26
23	Non-stoichiometric methanation as strategy to overcome the limitations of green hydrogen injection into the natural gas grid. <i>Applied Energy</i> , 2022, 309, 118462.	5.1	24
24	Design and operational performance maps of calcium looping thermochemical energy storage for concentrating solar power plants. <i>Energy</i> , 2021, 220, 119715.	4.5	21
25	A systematic approach for high temperature looping cycles integration. <i>Fuel</i> , 2014, 127, 4-12.	3.4	19
26	Energy consumption minimization for a solar lime calciner operating in a concentrated solar power plant for thermal energy storage. <i>Renewable Energy</i> , 2020, 156, 1019-1027.	4.3	19
27	Calcium looping as chemical energy storage in concentrated solar power plants: Carbonator modelling and configuration assessment. <i>Applied Thermal Engineering</i> , 2020, 172, 115186.	3.0	19
28	Modelling calcium looping at industrial scale for energy storage in concentrating solar power plants. <i>Energy</i> , 2021, 225, 120306.	4.5	18
29	Using the second law of thermodynamic to improve CO ₂ capture systems. <i>Energy Procedia</i> , 2011, 4, 1043-1050.	1.8	17
30	Renewable energy sources and power-to-gas aided cogeneration for non-residential buildings. <i>Energy</i> , 2019, 181, 226-238.	4.5	17
31	Techno-economic feasibility of power to gas "oxy-fuel boiler hybrid system under uncertainty. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 9505-9516.	3.8	17
32	Syngas Production From the Reforming of Typical Biogas Compositions in an Inert Porous Media Reactor. <i>Frontiers in Chemistry</i> , 2020, 8, 145.	1.8	17
33	Techno-economic assessment of an industrial carbon capture hub sharing a cement rotary kiln as sorbent regenerator. <i>International Journal of Greenhouse Gas Control</i> , 2021, 112, 103524.	2.3	16
34	High-temperature fuel cells for fresh water production. <i>Desalination</i> , 2005, 182, 471-482.	4.0	15
35	Efficiency and Energy Analysis of Power Plants with Amine-impregnated Solid Sorbents CO ₂ Capture. <i>Energy Technology</i> , 2018, 6, 1649-1659.	1.8	14
36	Performance of MnCl ₂ doped magnetic iron-carbon sorbent on mercury removal from flue gas: The effect of O ₂ and SO ₂ . <i>Fuel</i> , 2021, 285, 119064.	3.4	14

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37	Heat integration of alternative Ca-looping configurations for CO ₂ capture. <i>Energy</i> , 2016, 116, 956-962.	4.5	11
38	Combined carbon capture cycles: An opportunity for size and energy penalty reduction. <i>International Journal of Greenhouse Gas Control</i> , 2019, 88, 290-298.	2.3	11
39	Lab-scale experimental tests of power to gas-oxycombustion hybridization: System design and preliminary results. <i>Energy</i> , 2021, 226, 120375.	4.5	11
40	Avoidance of partial load operation at coal-fired power plants by storing nuclear power through power to gas. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 26063-26075.	3.8	10
41	Reducing cycling costs in coal fired power plants through power to hydrogen. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 25838-25850.	3.8	10
42	Energy Integration of High and Low Temperature Solid Sorbents for CO ₂ Capture. <i>Energy Procedia</i> , 2017, 114, 2380-2389.	1.8	8
43	Evaluation of Synergies of a Biomass Power Plant and a Biogas Station with a Carbon Capture System. <i>Energies</i> , 2021, 14, 908.	1.6	7
44	Improved Flexibility and Economics of Combined Cycles by Power to Gas. <i>Frontiers in Energy Research</i> , 2020, 8, .	1.2	6
45	Synthetic natural gas production in a 1ÂkW reactor using NiâCe/Al ₂ O ₃ and RuâCe/Al ₂ O ₃ : Kinetics, catalyst degradation and process design. <i>Energy</i> , 2022, 256, 124720.	4.5	6
46	Ab initio investigations of the C ₂ F ₄ S isomers and of their interconversions. <i>Journal of Fluorine Chemistry</i> , 2003, 124, 99-104.	0.9	5
47	Carbonate looping cycle for CO ₂ capture: Hydrodynamic of complex CFB systems. <i>Energy Procedia</i> , 2011, 4, 410-416.	1.8	5
48	Comparative study of optimized purge flow in a CO ₂ capture system using different sorbents. <i>Energy Procedia</i> , 2009, 1, 1359-1366.	1.8	4
49	A PDE model for microscopic simulation of solid oxide fuel cells. <i>Journal of Power Sources</i> , 2012, 201, 184-195.	4.0	3
50	Power to Gas technology under Spanish Future Energy Scenario. <i>Energy Procedia</i> , 2017, 114, 6880-6885.	1.8	3
51	Integration of Amine Scrubbing and Power to Gas. , 2020, , 109-135.		3
52	Integration of CO ₂ capture and conversion. , 2020, , 503-522.		2
53	The Role of Energy Storage and Carbon Capture in Electricity Markets. , 2020, , 1-37.		1
54	Integration of Power to Gas and Carbon Capture. , 2020, , 39-60.		1

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55	Thermodynamic Analysis of a SOFC Aystem for CHP Applications: Influence of Operation Parameters on Global Efficiency. ECS Transactions, 2007, 7, 1811-1820.	0.3	0
56	Oriented-Control Lumped Model of a SOFC Stack: Thermal and Electrochemical Response to External Perturbations. ECS Transactions, 2007, 7, 1995-2003.	0.3	0
57	Energy and exergy pertaining toÂsolid looping cycles. , 2015, , 15-38.		0
58	Energy Intensity Reduction of Ca-Looping CO2 Capture by Applying Mixing Loop Seals and Cyclonic Systems. International Journal of Chemical Reactor Engineering, 2015, 13, 523-532.	0.6	0
59	FROM TERMOGRAF TO THERMONATOR: DESIGN AND DEVELOPMENT OF AN APP FOR E-LEARNING BASED ON PROBLEMS IN THE FIELD OF THERMAL ENGINEERING. EDULEARN Proceedings, 2019, , .	0.0	0
60	ENHANCING THE ACQUISITION OF COMPETENCES THROUGH THE FLIPPED CLASSROOM MODEL. , 2019, , .		0
61	Status Review of PtG-CCU Hybridization. , 2020, , 61-84.		0